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## RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/080,943

DATE: 10/22/2002

TIME: 10:04:22

Input Set : A:\Iu99-pct.app

Output Set: N:\CRF4\10222002\J080943.raw

3 <110> APPLICANT: Field, Loren J.  
 4 Tsai, Shih-Chong  
 6 <120> TITLE OF INVENTION: P193 PROTEINS AND NUCLEIC ACIDS, AND USES THEREOF  
 8 <130> FILE REFERENCE: IU99-PCT  
 C--> 10 <140> CURRENT APPLICATION NUMBER: US/10/080,943  
 C--> 11 <141> CURRENT FILING DATE: 2002-10-09  
 13 <150> PRIOR APPLICATION NUMBER: 60/150,266  
 14 <151> PRIOR FILING DATE: 1999-08-23  
 16 <160> NUMBER OF SEQ ID NOS: 4  
 18 <170> SOFTWARE: PatentIn Ver. 2.1  
 20 <210> SEQ ID NO: 1  
 21 <211> LENGTH: 5217  
 22 <212> TYPE: DNA  
 23 <213> ORGANISM: Mus musculus  
 25 <220> FEATURE:  
 26 <221> NAME/KEY: CDS  
 27 <222> LOCATION: (62)..(5128)  
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 32 g atg gta ggg gag cta cga tac agg gaa ttc agg gtg ccc ctg ggg cct 109  
 33 Met Val Gly Glu Leu Arg Tyr Arg Glu Phe Arg Val Pro Leu Gly Pro  
 34 1 5 10 15  
 36 ggc ttg cac gcg tat ccg gat gaa ttg atc cgc caa cgg gtt ggc cat 157  
 37 Gly Leu His Ala Tyr Pro Asp Glu Leu Ile Arg Gln Arg Val Gly His  
 38 20 25 30  
 40 aat ggg cac ccc gag tat cag atc cgc tgg ctc atc ctc agg cgc ggg 205  
 41 Asn Gly His Pro Glu Tyr Gln Ile Arg Trp Leu Ile Leu Arg Arg Gly  
 42 35 40 45  
 44 gat gat ggg gac cgg gac tct aca gtg gac tgc aag gct gag cat atc 253  
 45 Asp Asp Gly Asp Arg Asp Ser Thr Val Asp Cys Lys Ala Glu His Ile  
 46 50 55 60  
 48 ctg tta tgg atg tct gac gat gag atc tat gcc aac tgc cac aag atg 301  
 49 Leu Leu Trp Met Ser Asp Asp Glu Ile Tyr Ala Asn Cys His Lys Met  
 50 65 70 75 80  
 52 ctg ggc gag aat ggc caa gtc atc gca cct tcc cgg gag tcc act gag 349  
 53 Leu Gly Glu Asn Gly Gln Val Ile Ala Pro Ser Arg Glu Ser Thr Glu  
 54 85 90 95  
 56 gca ggg gcc ctc gac aag tct gtg ctg ggg gag atg gaa aca gat gtg 397  
 57 Ala Gly Ala Leu Asp Lys Ser Val Leu Gly Glu Met Glu Thr Asp Val  
 58 100 105 110  
 60 aag tcc ttg att cag agg gcc ctt cgg cag ctg gag gag tgc gtg ggc 445  
 61 Lys Ser Leu Ile Gln Arg Ala Leu Arg Gln Leu Glu Glu Cys Val Gly  
 62 115 120 125

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64 acc gtg cct cct gcc cct ctc ctt cac acg gtc cat gta ctc agt gcc 493
65 Thr Val Pro Pro Ala Pro Leu Leu His Thr Val His Val Leu Ser Ala
66 130 135 140
68 tat gcc agc atc gag ccc ctc act ggc atc ttc aaa gac cgc agg gtt 541
69 Tyr Ala Ser Ile Glu Pro Leu Thr Gly Ile Phe Lys Asp Arg Arg Val
70 145 150 155 160
72 gtg aac ttg ctc atg cac atg ttg agc agt cct gat tat cag atc cgc 589
73 Val Asn Leu Leu Met His Met Leu Ser Ser Pro Asp Tyr Gln Ile Arg
74 165 170 175
76 tgg agc gca ggc cgg atg atc caa gct ctg tcc tcc cac gat gct ggg 637
77 Trp Ser Ala Gly Arg Met Ile Gln Ala Leu Ser Ser His Asp Ala Gly
78 180 185 190
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81 Thr Arg Thr Gln Ile Leu Leu Ser Leu Ser Gln Gln Glu Ala Ile Glu
82 195 200 205
84 aag cac ctg gat ttt gat agc cgc tgc gct ctg ctt gca ctg ttc gcc 733
85 Lys His Leu Asp Phe Asp Ser Arg Cys Ala Leu Leu Ala Leu Phe Ala
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88 cag gct act ctc acg gaa cac ccg atg tct ttc gag ggc gtt cag ctg 781
89 Gln Ala Thr Leu Thr Glu His Pro Met Ser Phe Glu Gly Val Gln Leu
90 225 230 235 240
92 cca cag gtc cca gga cgg ctg ctc ttc tcc ctg gta aaa cgc tac ctg 829
93 Pro Gln Val Pro Gly Arg Leu Leu Phe Ser Leu Val Lys Arg Tyr Leu
94 245 250 255
96 cac gtc acc ttc ctc ctg gat cgg ctg aac ggc gat gca ggg gat caa 877
97 His Val Thr Phe Leu Leu Asp Arg Leu Asn Gly Asp Ala Gly Asp Gln
98 260 265 270
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101 Gly Ala Gln Asn Asn Phe Ser Pro Glu Glu Leu Asn Val Gly Arg Gly
102 275 280 285
104 cgg ctg gaa ctg gaa ttc agt atg gcc atg ggc act ctg atc tct gag 973
105 Arg Leu Glu Leu Glu Phe Ser Met Ala Met Gly Thr Leu Ile Ser Glu
106 290 295 300
108 ctg gtg cag gcc atg cgc tgg gac ggg gcc tca agc aga cca gag agt 1021
109 Leu Val Gln Ala Met Arg Trp Asp Gly Ala Ser Ser Arg Pro Glu Ser
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112 tct tcc tcc tcc acc ttc cag cct cgg cca gca cag ttc cgc ccc tac 1069
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114 325 330 335
116 acc cag cgt ttc agg agg tgc agg cgg ttt cgc ccc cgt gcc tgc ttt 1117
117 Thr Gln Arg Phe Arg Arg Ser Arg Arg Phe Arg Pro Arg Ala Ser Phe
118 340 345 350
120 gcc agt ttt aat acc tat gcc ttg tat gtg cgg gac acg ctg cgg ccc 1165
121 Ala Ser Phe Asn Thr Tyr Ala Leu Tyr Val Arg Asp Thr Leu Arg Pro
122 355 360 365
124 ggg atg cgg gta cgg atg ctg gag aat tac gag gag atc gct gct ggg 1213
125 Gly Met Arg Val Arg Met Leu Glu Asn Tyr Glu Glu Ile Ala Ala Gly
126 370 375 380
128 gat gag ggc cag ttc cga cag agc aat gat ggc gtt ccc cca gcg cag 1261

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132	gtg	ttg	tgg	gat	tca	aca	ggc	cat	acc	tac	tgg	gtg	cac	tgg	cac	atg	1309
133	Val	Leu	Trp	Asp	Ser	Thr	Gly	His	Thr	Tyr	Trp	Val	His	Trp	His	Met	
134					405					410					415		
136	ctg	gag	atc	ttg	ggc	ttt	gag	gaa	gac	atc	gag	gat	gtg	att	gat	att	1357
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141	Glu	Glu	Leu	Gln	Glu	Leu	Gly	Ala	Asn	Gly	Ala	Leu	Ser	Ile	Val	Pro	
142			435				440				445						
144	ccg	tcc	cag	cgc	tgg	aag	ccc	ata	act	cag	ctc	ttt	gcc	gag	cct	tac	1453
145	Pro	Ser	Gln	Arg	Trp	Lys	Pro	Ile	Thr	Gln	Leu	Phe	Ala	Glu	Pro	Tyr	
146		450				455				460							
148	gtg	gta	ccc	gag	gag	gaa	gac	agg	gaa	gag	agc	gag	aac	ttg	acc	cag	1501
149	Val	Val	Pro	Glu	Glu	Glu	Asp	Arg	Glu	Glu	Ser	Glu	Asn	Leu	Thr	Gln	
150	465					470				475				480			
152	gct	gag	tgg	tgg	gag	ctc	ctc	ttc	ttc	atc	cgg	cag	ttg	agt	gag	gca	1549
153	Ala	Glu	Trp	Trp	Glu	Leu	Leu	Phe	Phe	Ile	Arg	Gln	Leu	Ser	Glu	Ala	
154				485					490					495			
156	gag	cgc	ctt	cac	atc	gtg	gat	ctc	ctg	caa	gac	cac	ctg	gaa	gag	gag	1597
157	Glu	Arg	Leu	His	Ile	Val	Asp	Leu	Leu	Gln	Asp	His	Leu	Glu	Glu	Glu	
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160	cgc	gtt	ctg	gac	tac	gat	atg	ctg	cct	gag	ctg	acc	gtg	ccc	gtt	gac	1645
161	Arg	Val	Leu	Asp	Tyr	Asp	Met	Leu	Pro	Glu	Leu	Thr	Val	Pro	Val	Asp	
162		515					520				525						
164	ttg	gcc	cag	gat	ctg	ctg	ttg	tct	ctg	cct	cag	caa	ctt	gag	gac	agt	1693
165	Leu	Ala	Gln	Asp	Leu	Leu	Ser	Leu	Pro	Gln	Gln	Leu	Glu	Asp	Ser		
166		530				535				540							
168	gct	ctg	agg	gac	ctg	ttc	agc	tgc	agt	gtc	tac	agg	aag	tat	ggg	ccc	1741
169	Ala	Leu	Arg	Asp	Leu	Phe	Ser	Cys	Ser	Val	Tyr	Arg	Lys	Tyr	Gly	Pro	
170	545				550					555					560		
172	gaa	gtc	ctg	gta	ggg	cat	cta	agc	tac	cca	ttt	gtg	cca	ggt	gcc	cag	1789
173	Glu	Val	Leu	Val	Gly	His	Leu	Ser	Tyr	Pro	Phe	Val	Pro	Gly	Ala	Gln	
174			565				570				575						
176	cca	aat	tta	ttc	gga	gcc	aat	gaa	gag	tct	gaa	gcc	aaa	gat	ccc	cca	1837
177	Pro	Asn	Leu	Phe	Gly	Ala	Asn	Glu	Glu	Ser	Glu	Ala	Lys	Asp	Pro	Pro	
178		580					585				590						
180	ctt	cag	agt	gcc	agc	cct	gcc	ctg	cag	cgc	ctg	gtg	gag	agc	ttg	ggc	1885
181	Leu	Gln	Ser	Ala	Ser	Pro	Ala	Leu	Gln	Arg	Leu	Val	Glu	Ser	Leu	Gly	
182		595				600				605							
184	ccc	gaa	ggg	gag	gtc	ctt	gtg	gaa	ctg	gaa	caa	gcc	ctc	ggc	tcc	gag	1933
185	Pro	Glu	Gly	Glu	Val	Leu	Val	Glu	Leu	Glu	Gln	Ala	Leu	Gly	Ser	Glu	
186		610				615				620							
188	gct	ccc	cag	gaa	act	gag	gtc	aag	tcc	tgc	ttg	ttg	cag	ctc	cag	gag	1981
189	Ala	Pro	Gln	Glu	Thr	Glu	Val	Lys	Ser	Cys	Leu	Leu	Gln	Leu	Gln	Glu	
190	625				630					635					640		
192	cag	ccc	cag	ccc	ttc	ctc	gct	ctg	atg	cgg	agc	ctg	gac	act	tcc	gcc	2029
193	Gln	Pro	Gln	Pro	Phe	Leu	Ala	Leu	Met	Arg	Ser	Leu	Asp	Thr	Ser	Ala	

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264	aag	cgc	tgc	cag	cag	ggg	ggc	att	aac	acg	cgc	atc	cgg	ggc	cta	gag	2893
265	Lys	Arg	Cys	Gln	Gln	Gly	Gly	Ile	Asn	Thr	Arg	Ile	Arg	Gly	Leu	Glu	
266			930					935					940				
268	gtg	ctg	ggc	ccc	aag	ccc	acc	ttc	tgg	cca	gtg	ttc	cga	gag	caa	ctg	2941
269	Val	Leu	Gly	Pro	Lys	Pro	Thr	Phe	Trp	Pro	Val	Phe	Arg	Glu	Gln	Leu	
270			945					950					955			960	
272	tgc	cgg	cac	acg	cgc	ctc	ttc	tac	atg	gtt	cgg	gcc	cag	gca	tgg	agt	2989
273	Cys	Arg	His	Thr	Arg	Leu	Phe	Tyr	Met	Val	Arg	Ala	Gln	Ala	Trp	Ser	
274					965						970						
276	cag	gac	ata	gca	gag	gac	cgc	cgg	agc	ctt	ctg	cac	ctg	agt	tct	agg	3037
277	Gln	Asp	Ile	Ala	Glu	Asp	Arg	Arg	Ser	Leu	Leu	His	Leu	Ser	Ser	Arg	
278				980						985				990			
280	cta	aat	ggg	gct	ctg	cgc	cat	gaa	cag	aat	ttt	gca	gag	cgc	ttc	ctt	3085
281	Leu	Asn	Gly	Ala	Leu	Arg	His	Glu	Gln	Asn	Phe	Ala	Glu	Arg	Phe	Leu	
282			995					1000					1005				
284	cct	gat	atg	gag	gcc	gcc	caa	gca	ctg	agc	aag	acc	tgc	tgg	gag	gcg	3133
285	Pro	Asp	Met	Glu	Ala	Ala	Gln	Ala	Leu	Ser	Lys	Thr	Cys	Trp	Glu	Ala	
286			1010					1015					1020				
288	ctg	gtc	agc	ccc	ctg	gtg	cag	aac	att	aca	tct	ccc	gat	gag	gac	agc	3181
289	Leu	Val	Ser	Pro	Leu	Val	Gln	Asn	Ile	Thr	Ser	Pro	Asp	Glu	Asp	Ser	
290		1025				1030					1035				1040		
292	acc	agc	tcc	ttg	ggc	tgg	ctg	ctg	gat	cag	tac	ttg	gga	tgc	agg	gag	3229
293	Thr	Ser	Ser	Leu	Gly	Trp	Leu	Leu	Asp	Gln	Tyr	Leu	Gly	Cys	Arg	Glu	
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296	gct	gcc	tac	aat	ccc	cag	agc	agg	gct	gct	gct	ttc	tcc	tcc	cgg	gtt	3277
297	Ala	Ala	Tyr	Asn	Pro	Gln	Ser	Arg	Ala	Ala	Ala	Phe	Ser	Ser	Arg	Val	
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304	cct	ccg	gtg	gtg	gcc	atc	cct	cga	tcc	aag	ggc	agg	aac	aga	atc	cat	3373
305	Pro	Pro	Val	Val	Ala	Ile	Pro	Arg	Ser	Lys	Gly	Arg	Asn	Arg	Ile	His	
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308	gac	tgg	agc	tac	ttg	atc	acc	cgg	ggc	ctt	cca	agt	agc	atc	atg	aag	3421
309	Asp	Trp	Ser	Tyr	Leu	Ile	Thr	Arg	Gly	Leu	Pro	Ser	Ser	Ile	Met	Lys	
310		1105				1110					1115				1120		
312	aac	ctg	acc	cgc	tgt	tgg	cgg	tct	gtg	gtg	gag	gag	cag	atg	aac	aag	3469
313	Asn	Leu	Thr	Arg	Cys	Trp	Arg	Ser	Val	Val	Glu	Glu	Gln	Met	Asn	Lys	
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316	ttt	ctc	agt	gcg	tcc	tgg	aaa	gac	gat	gat	ttc	gta	ccc	cgc	tat	tgc	3517
317	Phe	Leu	Ser	Ala	Ser	Trp	Lys	Asp	Asp	Asp	Phe	Val	Pro	Arg	Tyr	Cys	
318			1140						1145					1150			
320	gag	cgc	tat	tac	gtc	ctg	cag	aag	tcc	agc	tca	gag	ctg	ttt	ggg	cca	3565
321	Glu	Arg	Tyr	Tyr	Val	Leu	Gln	Lys	Ser	Ser	Glu	Leu	Phe	Gly	Gly	Pro	
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L:10 M:270 C: Current Application Number differs, Replaced Current Application Number

L:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date